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Information and Communication Technologies Task Force

Third annual report of the Information and Communication Technologies Task Force

Note by the Secretary-General

The Secretary-General has the honour to transmit to the Economic and Social Council the third annual report of the Information and Communication Technologies Task Force, as requested in E/2001/7.

Summary

In its third year, the Information and Communication Technologies Task Force, through its core activities, working groups and regional nodes, has successfully contributed to advancing the multi-stakeholder discussion on Internet governance, enabling environment and other high-profile policy issues; added to progress in measuring, monitoring and analysing the impact of information and communications technologies (ICT) on the achievement of the internationally agreed development goals; further supported and promoted collaborative initiatives at the regional, subregional and national levels and provided significant input to the formulation of a comprehensive United Nations information and communications technologies strategy.

The Task Force continues to pursue the mainstreaming of ICT into development as a powerful tool that can enable the attainment of the internationally agreed development goals. It is also contributing towards making the Tunis phase of the World Summit on the Information Society a success. The ongoing programme of reform and renewal of the United Nations is affording an opportunity for the Task Force to perform its mandate of providing advice to the Secretary-General on ICT.

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I. Introduction

1. The present report covers the activities of the United Nations Information and Communication Technologies Task Force for the period from February 2004 to February 2005. It provides an overview of the current environment, describes the role of the Task Force in promoting the access and application of information and communications technologies (ICT) for advancing United Nations development goals, presents an outline of the major activities of the Task Force, an assessment of its effectiveness and an overview of what the Task Force will strive to achieve in the final year of its mandate.

II. Current environment[1]

2. Science and technology, and particularly the new ICT, are characterized by rapid changes. For example, the exceedingly swift spread of access to the Internet via mobile phones and the emergence of the "triple play" of voice, video and data transmitted over a single platform make this long-heralded convergence a reality and constitute a sign of a new dynamic phase triggered by the Internet's growth towards ubiquity. Technological change has considerably reduced the cost of ICT goods and services and broadened the scope of technology choices and solutions.

3. ICT are cross-cutting technologies with a fundamental impact on the various sectors of society, culture and the economy. A decade ago, ICT were considered marginal to the issues of economic growth and poverty reduction. Since then, scepticism has given way to more open perceptions and attitudes. ICT are now seen as powerful enablers of development goals. In many developing countries, policy attention has begun to turn towards the convergence of industrial policies that emphasize manufacturing capabilities and science, technology and innovation policies that are increasingly seen as important tools for development because of their power to generate and use knowledge.

4. More precisely, ICT are increasingly seen analysts, the Governments of developing countries, and development agencies as stimulating collective learning, thus enhancing socio-economic development; improving individual people's lives by allowing them to acquire the knowledge and skills that empower them to be productive in innovative ways; and enhancing overall economic growth and income by raising productivity.

5. Policies designed to enhance the role of ICT in development have created new avenues for reducing poverty, especially through the beneficial effects they have on mainstream development objectives — health, education, capacity-building and improving living conditions.

6. However, research undertaken by the Organization for Economic Cooperation and Development (OECD) Development Assistance Committee (DAC) indicates that not enough attention has been paid in economic analysis and policy making to the significance of ICT for economic growth. While in OECD countries, the links between ICT, productivity and economic growth have been established (albeit only recently), the more precise impact of investment in ICT for developing countries, notably least developed countries (LDCs), remains largely under-researched.

7. There is an ongoing debate, which is relevant for both developed and developing countries, concerning the extent to which production and distribution decisions in the information sectors differ from those in manufacturing industries. The emerging consensus is that ICT may lead to fundamentally different business models. The four main aspects of this are:

- Network effects: The spread of a successful hardware or software innovation is often accompanied by an exponential increase in the usefulness of that standard for its users, as more and more elements can be connected to an interactive system. The value of a network is seen to increase in approximate proportion to the square of its number of users. This effect, however, may induce monopolists to lock customers into network relationships.

- Production by copying: In traditional markets, the firm's size is constrained by the increasing marginal costs of material and resources. For digital products and software, it is different: once initial costs are paid, each digital copy costs next to nothing. Though the cost of assembling the original good may be very high, for instance, in the case of new operating systems, software or movies, digital reproduction involves a simple operation that can be carried out with little technical skill and equipment. The low costs of copying not only expand the market, but also increase the incentive to command the largest share of a "digital goods market". The largest supplier will have the lowest marginal costs and will thus appear to be a "natural monopoly".

- Properties of information: Information makes its impact on users in a very specific manner: it does not change their physical state or modify their physical circumstances. Instead, it affects the user's thoughts, knowledge or feelings. Users learn something new or gain pleasure or receive instructions that help them behave in ways that make them more effective and successful. What matters is that the receipt of such signals by individuals does not destroy or alter the original message. This is the core reason why information is considered a "public" rather than a "private" good. For economic reasons, there is a tendency to exclude those who do not pay or cannot afford to pay for the consumption of the information good either through electronic walls, legal sanctions against unauthorized copying or technical copyright-management systems. Copyright statutes try to strike a judicious balance between the temporary protection of exclusive property rights and the subsequent free use of new inventions, whether technical or artistic in nature.

- "Moore's Law": The pace of change in ICT development exceeds by far the rate of change in earlier technologies. Driven by the factors underpinning "Moore's Law" (the doubling of the number of transistors per square inch every 18 months), advances in information technology follow one another at enormous speed. Those who argued that ICT provide developing countries with an opportunity to "leapfrog" entire stages of technological development and, thus, to compete on more equal terms with industrial countries on the basis of ICT knowledge may be disappointed to some extent. By the time most developing countries have deployed "second generation wireless networks", a considerable number of developed countries will have rolled out "third generation networks" offering more powerful functionalities. On the other hand, Moore's Law implies that the process of catching up can occur much more quickly. For instance, whereas it took developed economies on average

20 to 30 years to move from 10 to 30 phones (fixed-line or mobile) for every 100 inhabitants, today many developing countries are showing that it can be done in less than 10 years.

8. There exist, however, many examples showing how ICT can contribute to development through "competitive edge technologies", as well as through what is sometimes called "appropriate technologies". The Dal Lake wireless Internet (wi-fi) project in India is a pertinent case. With the de-licensing of the radio spectrum for spread-spectrum, packet-based communications in India, wideband connectivity has been extended — using wi-fi technology — to sparsely populated communities. The project is revolutionary and has ample potential for replication.

9. The example illustrates that portable Internet technology could become what is called a "disruptive technology". This technology, indeed, may be able to break traditional (quite long) network planning cycles and the sequence of high fixed network costs related to such network planning cycles. The term "portable Internet" — the title of a 2004 International Telecommunication Union (ITU) Internet report — is a generic term describing a platform for high-speed data access using Internet protocol, covering advanced wireless technologies like wi-fi, WiMAX, IMT-2000 direct spread, 3G, ultra wide band and radio frequency identification tags, operating at long, medium and short ranges, and new techniques that make more efficient use of the available spectrum, including spread spectrum, smart antennae, agile radios and mesh networks.

10. To properly assess the need for, and the potential of, the portable Internet, it might be expedient to understand that the developing world, in general, seems to strongly express a preference for mobile phones over fixed-line ones. Indeed, Internet penetration in the developing world has grown at a slower rate than mobile phone technology in that same area since 2000. It is, therefore, important to reach out to the growing number of users who have a mobile but no fixed-line telephone. Handheld devices that are Internet-enabled could open up the information gateway to new and potentially vibrant markets. This could help promote the policy goals of universal access while at the same time expanding markets.

11. In substance, the dual challenge we face is to foster connectivity for the world's population and use it for advancing sustainable development. Ultimate success in the drive to ensure access must be measured by the achievements in sustainable development.

12. Financing options facing developing countries as they attempt to facilitate growth in the use and deployment of ICT remain a major item on the development policy agenda. ICT infrastructure financing in developing countries traditionally either came from government budgets or from revenues from post, telegraph and telephone authorities or from donors and international financial institutions (IFI). The transforming effects of technological change and the trend towards deregulation and privatization of the telecommunications industry, which accelerated in the 1990s, have resulted in major shifts in the financial strategies and options among ICT stakeholders: development banks and bilateral donors became instrumental in generating a greater reliance on private capital. IFI redirected public resources from direct financing of infrastructure projects to policy reforms and other mechanisms to support infrastructure development.

13. This shift in stakeholder policies pertaining to the financing of ICT went hand-in-hand with a considerably increased understanding of the crucial importance of the enabling environment for ICT. Promoting local investment and attracting foreign direct investment in ICT depends crucially upon a favourable environment, underpinned by good governance and the rule of law. An ICT policy and regulatory environment that encompasses open entry, fair competition and market-oriented regulatory practices should match a supportive development policy environment, thus integrating ICT into poverty- reduction policies and processes.

14. As the rapid and successful use of ICT is becoming increasingly central to the development process, developing countries are faced with an additional set of financing requirements. It is recognized that, despite increased private industrial and financial involvement in ICT, the potential of the ICT sector for development is far from being fully exploited. This is particularly true for the provision of ICT infrastructures in rural areas of developing countries. These are not easily covered by private suppliers because of the perception of lower profitability and higher investment risks. This perception is changing: national universal service/access funds and other mechanisms to lower costs of delivery to underserved markets, the leveraging of market forces for the promotion of community access and the creation of multi-purpose community telecentres are understood to require scaling-up existing financial resources through innovative financial mechanisms and schemes. The potential of public-private partnerships at different levels could be much better exploited. Regional cooperation, multi-stakeholder partnerships and seed financing are critical elements for both backbone and last-mile solutions in developing countries.

15. At the same time, building human resource capacities and knowledge assets at every level is a main requirement for achieving the internationally agreed development goals. ICT, in principle, hold great promise for development in all societies; but the social impact should be assessed and appropriate policy regulatory and financial measures taken to ensure that the future information society is as fair and inclusive as possible.

16. ICT that deliver up-to-date information applications, content and services are relevant for developed and developing countries alike. Increasing domestic and international public sector ICT capabilities is a first-level priority for many stakeholders. Some international donors, however, are seemingly re-directing their attention to both ICT policy and infrastructural developments and to mainstreaming connectivity activities for ICT and development.

III. Role of the Information and Communication Technologies Task Force

17. As a global forum for placing ICT at the service of development, the ICT Task Force has grown in stature and influence since its inauguration in 2001. With the potential of ICT to enable the attainment of internationally agreed development goals becoming widely embraced, the Task Force provides a platform to discuss international norms, policies and practices through the work of its networks, working groups and members.

18. The Task Force is not an operational, implementing or funding agency, but provides a platform and focal point for discussing the global ICT-for-development agenda, including issues related to strategic direction, policy coherence and coordination and advocacy in relation to the global ICT-for-development agenda. It has the mandate to help forge a strategic partnership between the United Nations system, private industry and other relevant stakeholders in putting ICT at the service of development. Meetings, in particular a series of global forums focused on key issues held over the last two years, bring together Task Force members with international development and ICT experts, policy makers, leading private sector representatives and members of civil society and non-governmental organizations and provide a platform for sharing experiences, exchanging views, catalysing new partnerships and building consensus in complex and politically sensitive policy areas.

19. The plan of action and mission statement of the Task Force were built on guidance contained in the United Nations Millennium Declaration, the 2000 ministerial declaration of the Economic and Social Council and the recommendations contained in the report of the Secretary-General (E/2001/7). In 2003, members of the Task Force and its Bureau reviewed and assessed the experience and lessons learned in the first two years of work. On the basis of these assessments, a business plan was developed to provide a rationalized framework for the activities of the Task Force. The primary objectives of the business plan consisted in linking ICT and internationally agreed development goals, including those contained in the Millennium Declaration; building multi-stakeholder partnerships; addressing ICT policy and governance; and contributing to the creation of an enabling environment for digital development.

20. The Task Force strives for efficiency, accountability, transparency and agility. It has built a global network of thematic working groups and regional nodes as platforms for the implementation of its plan of action and business plan and for addressing critical elements of the challenge of harnessing the potential of the ICT revolution for development. It has used an open, inclusive and decentralized approach to develop stakeholder campaigns and outreach, utilizing its website and networks. It also works in cooperation with other bodies active in the field of ICT-for-development.

21. In January 2004, the Secretary-General extended the mandate of the Task Force until the end of 2005, in light of the role that it is playing in the process of the World Summit on the Information Society (WSIS).

IV. Activities and accomplishments

22. The business plan defined five priority activity tracks under which the Task Force organized its work in 2004: benchmarking progress in the use of ICT-for-development; promoting a dialogue on Internet governance and other policy issues; promoting an enabling environment; supporting ongoing partnerships; and strengthening supporting activities, especially fundraising.

A. Benchmarking progress in the use of information and communication technology for development

23. While there are many examples of the positive transformational effects of ICT on development, debate is continuing regarding how and to what extent the application of ICT furthers the achievement of social goals and economic growth. A variety of tools already exist to monitor ICT readiness and use. The challenge remains, however, to develop better tools to effectively measure and monitor the current and potential impact of ICT on development and to foster mechanisms to share these tools with the international development community.

1. Working party on information and communication technology indicators and Millennium Development Goals mapping

24. Through its working party on ICT indicators and Millennium Development Goals mapping, led by Canada, the Task Force has continued to examine the impact of ICT in furthering efforts to achieve the MDGs. At the seventh meeting of the Task Force in November 2004, the working party presented a working paper, "Measuring, monitoring and analysing ICT impacts", which proposed a measurement framework, including qualitative and quantitative indicators that would provide a basis for assessing the impact of ICT on the achievement of the Goals. The paper also reviews a number of selected case studies illustrating how ICT have had a clear and important impact in four development areas: economic development, education, health and the environment. The review of the measurement methodologies used in each of these case studies will contribute to the development of impact indicators. The framework proposed in the paper will be further developed during 2005 and presented to key international events such as the High-level Plenary Meeting of the General Assembly and the second phase of the World Summit on the Information Society (WSIS).

25. The working party has joined the Partnership on Measuring ICT for Development, formed under the leadership of the United Nations Conference on Trade and Development (UNCTAD), to work towards defining and collecting a set of common ICT indicators and assisting developing countries in their efforts to produce information society statistics. The Partnership, which includes key stakeholders involved in the statistical measurement of ICT, such as ITU, OECD, UNCTAD, the United Nations Educational, Scientific and Cultural Organization Institute for Statistics, the Economic Commission for Africa, the Economic Commission for Latin America and the Caribbean, the Economic and Social Commission for Asia and the Pacific, the Economic and Social Commission for Western Asia and the World Bank, provides an open framework for coordinating ongoing and future activities and for developing a coherent and structured approach to advancing the development of ICT indicators globally and, in particular, in the developing countries. The working party is contributing to the work of the Partnership by promoting the list of ICT indicators that is being developed and by examining more closely which of the indicators are most relevant to developing countries and could be used to measure progress in achieving the internationally agreed development goals.

26. In February 2005, the Partnership organized a WSIS thematic meeting on measuring the information society in Geneva. The meeting, co-sponsored by the ICT Task Force, addressed the subject of the statistical measurement of the

information society, including a core list of ICT indicators that could be harmonized at the international level and that all countries might consider collecting; the needs of national statistical offices in developing countries as regards technical assistance in the compilation of ICT indicators; and mechanisms to measure impact and to quantify the relevance and contribution of ICT towards advancing development and achieving the internationally agreed development goals.

2. Contribution to the work of the Millennium Project Task Force 10 on Science

27. The ICT Task Force was invited to contribute to the work of the Millennium Project Task Force 10 on Science, as part of the United Nations review on progress towards the attainment of the MDGs. The ICT Task Force contributed an ICT chapter within the general report, entitled "Innovation: applying knowledge for development", and a comprehensive sub-report, "Innovation and investment: information and communication technologies and the millennium development goals"[2] in support of the Millennium Project. The work asserts that, despite the obvious benefits to economic growth, including pro-poor growth of the global explosion in ICT supply and demand, it is as an enabler for the achievement of development goals that ICT will most profoundly impact the achievement of the MDGs within a broad and integrated development approach rather than simply as a stand-alone production sector.

B. Promoting a dialogue on Internet governance and other policy issues

28. The first phase of the WSIS agreed to pursue a dialogue on Internet governance with a view to further consideration of these issues. The ICT Task Force made use of its position as a multi-stakeholder forum to engage relevant actors in exchange of viewpoints on this sensitive issue, in order to contribute to the international discussion and help create a foundation for a meaningful and consensual debate. The Task Force has also made concerted effort to strengthen the capacity of, and promote dialogue among, policy makers at municipal and other sub-national levels.

1. Global Forum on Internet Governance

29. The Global Forum on Internet Governance, held in conjunction with the sixth meeting of the Task Force from 25 to 27 March 2004, was opened by the Secretary-General. The Forum was conceived as a contribution to a process of consultations on Internet governance.

30. The Forum attracted the participation of more than 300 representatives of all stakeholders, including leaders of the Internet community. Despite the diversity of views expressed by various stakeholders, the Forum fostered a climate of confidence and trust and a willingness to discuss complex issues of Internet governance.

31. The results of the meeting were fed to the World Group on Internet Governance (WGIG). As an outcome of the Global Forum on Internet Governance and a contribution to WGIG, the publication *Internet Governance: A Grand Collaboration* was issued and widely circulated. As indicated in the introduction, this collection of papers contributed to the Forum[3] suggested some emerging

commonalities in views on Internet governance, including the recognition of the need for a multi-stakeholder approach to preserve the stability and utility of the Internet and to engage developing countries so that they can participate effectively in the governance process.

2. African online discussion forum on Internet governance

32. The Economic Commission for Africa, in collaboration with the ICT Task Force, organized an online discussion forum on Internet governance in March 2004, to promote debate on Internet governance issues from an African perspective and within the framework of the African Information Society Initiative (AISI), aimed at ensuring meaningful and effective participation of African countries in this process. Policy makers and a broad range of AISI stakeholders interacted and exchanged views on the challenges of the global Internet and ICT governance in Africa, not only from a technical perspective, but also in ethical, societal and legal contexts. The discussion and recommendations expressed by participants focused on the global dimension, the African context and the WSIS process.

3. Internet governance analysis

33. The Internet Governance Project, an interdisciplinary consortium of academics at Syracuse University, Georgia Institute of Technology and the Center for Comparative and International Studies of the University of Zurich and the Swiss Federal Institute of Technology, conducted research on the current status of governance, identifying the issues, institutional responsibilities and gaps. The final report, "Internet governance: the state of play", was presented to WGIG.[4]

34. The paper's key recommendations included a proposed definition of Internet governance, suggestions on the adoption of a normative end-to-end principle to govern internetworking and conclusions on the need to find a foundation of legitimacy for non-State actors in governance. The paper also summarized the state of agreements, disagreements and gaps in various areas and charted organizational involvement by issue.

4. Regional meetings on Internet governance

35. Following its Global Forum on Internet Governance, the Task Force continued to promote the international dialogue regarding this important issue by organizing, in cooperation with its regional networks, regional workshops on Internet governance in Shanghai (China), Cuzco (Peru), Port of Spain (Trinidad and Tobago) and Accra (Ghana). The outcomes of each of the meetings were presented to the WGIG.

Asia/Pacific

36. The Asia and Pacific regional meeting on Internet governance, co-sponsored by the ICT Task Force and the Ministry of Science and Technology of the People's Republic of China and organized by the Asia Regional Network secretariat of the ICT Task Force, was held on 21 May 2004. Its objectives were to further discuss the challenges and solutions in the process of implementing WSIS outcomes and to bring together experts, practitioners and private sector representatives from the region and the world. The meeting was an important parallel session for the Fourth

Annual Forum on City Informatization in the Asia-Pacific Region (see para. 43 below).

Latin America

37. The Latin American forum on the information society held in Cuzco, Peru, from 13 to 15 October 2004, was organized by the ICT Task Force Latin American and Caribbean Regional Network, the Internet Corporation for Assigned Names and Numbers (ICANN) At Large and Alfa-Redi (a non-governmental organization). Approximately 50 ICT practitioners and representatives from Latin American countries came together to formulate common positions and stakeholder interests regarding Internet governance. Participants discussed the role of Internet governance as a core part of governance in the global information society and a possible roadmap of discussions towards Tunis. Special emphasis was given to areas that require international articulation and/or regulation. The meeting included a pre-event tutorial on Internet governance presented by ICANN. The meeting concluded with the proposal to create a Latin American and Caribbean working group to report to the WGIG, in order to provide the regional point of view on the subject.

Caribbean

38. The Caribbean Forum on the Information Society, held in Port of Spain from 26 to 27 October 2004, was convened by the Latin American and Caribbean Regional Network and the United Nations Economic Commission for Latin America and the Caribbean as part of the preparation process for WSIS. Approximately 70 ICT practitioners and country representatives from the Caribbean Development and Cooperation Committee (CDCC) member countries came together with the objectives of building the inclusion of these countries and their vital constituents in WSIS, addressing lessons and opportunities of specific ICT experiences in the CDCC member States, building partnerships for the Caribbean information society and advancing proposals for Internet governance. The meeting discussed, in depth, a common definition of Internet governance and the social and economic aspects of the problem. Participants also addressed the importance of multilateral cooperation under the United Nations framework, the provision of universal access to a stable and secure Internet system, the protection of intellectual property rights and the creation of wealth, the provision of affordable access to broadband and the establishment of transparent and democratic procedures with full involvement of Governments, the private sector and civil society.

Africa

39. The ICT Task Force, together with the Economic Commission for Africa, Industry Canada and the International Organization of la Francophonie (OIF) organized a workshop on Internet governance to provide African stakeholders with a forum to learn, comment and provide input into the official African position on the subject. The workshop was organized as a pre-event to the African regional preparatory meeting to the second phase of WSIS, to be held in Accra on 28 and 29 January 2005, providing an opportunity for Internet technology engineers, ICT experts and representatives from Governments, the private sector, civil society, academia and regional and international organizations to exchange views and visions on the technical, ethical, societal and legal dimensions of the global Internet governance with a particular focus on its implications for Africa.

40. The workshop focused on public policy issues, Internet resource management and Africa's role in the creation of Internet governance policies. The workshop clearly showed the need for capacity-building and awareness-raising in Africa regarding the issues related to Internet governance. The outcomes of the meeting fed into the plenary session of the regional conference for WSIS and the activities of WGIG.

41. The Economic Commission for Africa and the ICT Task Force prepared a publication entitled "The Internet governance space: exploring the core issues from Africa's perspective".[5]

42. The Economic Commission for Africa, the ICT Task Force and the United Nations Division for the Advancement of Women organized four regional workshops on the theme of strengthening the capacity of national gender machineries through the effective use of ICT. The main objectives of the workshops were to enhance the capacity of national gender machineries in African countries to advocate for successful gender equality policies and act as catalysts for systematic gender mainstreaming in all policies and programmes, nationally and regionally.

5. City informatization in the Asia-Pacific region

43. The fourth annual forum on City Informatization in the Asia-Pacific Region was held from 20 to 22 May 2004, in Shanghai, China. The Forum was initiated by the Shanghai Municipal People's Government and the United Nations Department of Economic and Social Affairs. It was co-sponsored by the United Nations Development Programme, ITU, the ICT Task Force and the Chinese Government, including the State Council Informatization Office, the Ministries of Science and Technology, Information Industry and Commerce and the Chinese Academy of Sciences.

44. Three main themes addressed were e-governance, e-technology and e-application. A number of events were organized around the meeting on e-government and on city informatization in the Yangtze Delta. A workshop for an assessment index on city informatization and the ICT Task Force regional meeting on Internet governance took advantage of the gathering of worldwide ICT stakeholders. A Shanghai international informatization expo on ICT for development was also organized.

6. Municipal policy making on information and communication technology for development — Wireless Internet Institute

45. The Wireless Internet Institute (W2i) and the ICT Task Force have developed the Global Municipal Government and Local Authorities Series to accelerate the adoption of broadband wireless Internet in municipalities and underserved urban populations around the world. Undertaken in partnership with industry leaders, such as IBM and Intel, and international development organizations, such as the United Nations Institute for Training and Research and the Inter-American Development Bank, the Series aims to raise awareness about opportunities for local government to build high-capacity wireless communications infrastructure in support of municipal economic, social and educational development. Three conferences were held within the period covered by this report: Wireless Internet and Municipal Public Safety, held in the United States of America in June 2004; Wireless Internet and Municipal Government in Latin America: The Mexican experience, held in Mexico in

September 2004; and Wireless Internet and Municipal Government in Latin America: The Brazilian Experience, held in Brazil in February 2005.

7. The Global ePolicy Resource Network

46. The Global ePolicy Resource Network[6] provides a focal point for global efforts in support of national e-strategies for development. The Network provides ICT policy makers in developing countries with the depth and quality of information needed to develop effective national e-policies and e-strategies. The ICT Task Force Working Group on National and Regional e-Strategies has supported the Network's efforts since its launch at WSIS in December 2003.

47. In 2004, the Network was active in building capacity, in particular, among policy makers in Africa. Together with the Economic Commission for Africa and the ICT Task Force, it organized a two-day workshop for the Tanzania Parliamentary Network on ICT for Development, which resulted in the adoption of an action plan for the Network.

C. Promoting an enabling environment

48. The ICT Task Force business plan underlines the decisive role that an enabling environment plays in the emergence of a global development-oriented information society. The creation of an enabling environment for ICT-driven development relies on establishing a legal and policy framework that encourages investment, innovation and entrepreneurship. As identified by the Task Force, one effective framework for maximizing the contribution of ICT to development consists of a set of public policies that operates at several levels: (a) the development of national strategies at the macropolicy level, which favour the development and deployment of ICT in pursuit of social and economic development goals; (b) economic strategies that involve the design, development and implementation of effective policies in areas such as telecommunications policy and regulation, spectrum management and electronic commerce; and (c) accurate measurement and benchmarking, in order to assess the effectiveness of the implementation of policy objectives in relation to development goals and targets.

49. Among the priority areas for action contained in the third track of the business plan is the promotion of regulatory regimes conducive to the elimination of barriers to competition and encouraging investments in communications infrastructure and support for the development of comprehensive and sustainable ICT-for-development policies and national e-strategies. The Task Force has made consistent efforts to bring the issue of an enabling environment to the attention of world leaders and help strengthen coherence in the development and implementation of concrete measures to shape the enabling environment necessary for attracting investments and stimulating the development of applications in various sectors, such as education, health, e-government and e-commerce.

1. Enabling environment expert meeting

50. Bringing together a group of ICT-for-development experts representing Governments, the private sector, civil society and intergovernmental organizations, the Task Force convened a special meeting on enabling environment on 27 May 2004, in New York. This meeting explored modalities and partnerships for

implementing an integrated programme to promote and support an enabling environment for the emergence of a global development-oriented information society. This meeting and the subsequent output formed the basis for the Global Forum on Enabling Environment.

2. Global Forum on Enabling Environment

51. The Global Forum on Enabling Environment and the seventh meeting of the ICT Task Force, hosted by the Government of Germany, was held in Berlin on 19 and 20 November 2004. The Forum aimed at raising awareness of issues concerning policy, financing and partnerships for the creation of an enabling environment. The Forum attracted the participation of more than 250 representatives of all stakeholders, including senior government officials from a number of developed and developing countries, executives from the private sector and prominent representatives of the ICT-for-development community, civil society and academia.

52. At the core of the meeting were two substantive sessions. The first one was on policy and regulatory issues, including low-cost access, promotion of competition and market development and institution- and capacity-building. The second focused on financing ICT-for-development and included a presentation by the United Nations Development Programme on the work of the Task Force on Financing Mechanisms. Break-out sessions explored more in-depth policy and regulatory issues, new models for financing ICT for development and promoting private sector investment and entrepreneurship.

53. In the intensive two-day discussions, there was strong agreement that all stakeholders have a role in the creation of an enabling environment. Particular emphasis was placed on the responsibility of Governments and independent regulatory bodies to produce policy and regulatory environments conducive to the propagation of ICT-for-development applications and the attraction of investment as well as the responsibility of the private sector to provide infrastructure, devices and content targeted at people's needs. Participants stressed the need to measure, benchmark and share information on successful policies in creating an environment that would lead to an inclusive, people-centred and development-oriented information society. On financing, opinions diverged over whether there was a need for new resources or existing resources, used more effectively, could adequately fund ICT for development. A number of proposals were presented on potential revenue streams, including the creation of various funds, taxes and other innovative models.

54. As an outcome of the Global Forum, the Task Force published the sixth volume in its series, *Creating an Enabling Environment: Toward the Millennium Development Goals*.[7] The book contains key presentations and contributions that address policy and regulatory issues; identify areas and modalities for engaging stakeholders in innovative partnerships; outline models and modalities conducive to the elimination of existing barriers to infrastructure and services diffusion; and evaluate the adequacy of existing financial mechanisms to meet the challenges of ICT for development.

3. Open access workshop

55. Recognizing that access is essential to bringing the benefits of the information age to all, the Working Group on Low Cost Access and Connectivity organized, in

partnership with the Swedish International Development Cooperation Agency and the Kista Information Technology University, a second international workshop on open access. The workshop was aimed at identifying successful solutions and standards for access networks promoting open universal access on a very practical level, as well as sustainable business models for the operation and maintenance of such networks which could be disseminated as best practices. The workshop was held in Stockholm, Sweden, in May 2004, and focused on access issues related to health, education and entrepreneurship. It was attended by over 50 representatives of Governments, civil society organizations and the private sector.

4. Development Cooperation Workshop

56. The Task Force co-sponsored a two-day conference and workshop on the theme "ICT — a tool for poverty reduction? — challenges for development cooperation", held in Uppsala, Sweden, in September 2004. The conference was organized by the Uppsala University, the Swedish International Development Cooperation Agency and ideal/ICT4Africa, with the support of the Swedish Development Forum, the British Council, Kista Information Technology University and the ICT Task Force. The conference focused on ICT possibilities and challenges for development in poor countries, with a special focus on access in schools and urban slums, access for women, and the possibility of access for all.

D. Building partnerships

57. Partnerships and the synergies they can produce are at the core of the Task Force's mandate. Throughout 2004, the ICT Task Force strengthened existing relationships and built new ones. Memorandums of understanding on cooperation were signed with the United Nations Institute for Training and Research, the AllAfrica Foundation, the World Summit Award, the Stockholm Challenge Award and the World Federation of Scientists. The United Nations Fund for International Partnerships has continued to provide support to the Task Force in its efforts to build multi-stakeholder partnerships.

58. At the same time, the Task Force, its working groups and regional nodes continued to support its long-term partners in a number of successful ongoing activities and events.

1. The Global e-Schools and Communities Initiative

59. The Global e-Schools and Communities Initiative[8] (GeSCI) was launched in December 2003, in Geneva at WSIS. Originally a joint project of the working group on human resource development and capacity-building and the Working Group on Low Cost Access and Connectivity of the ICT Task Force, GeSCI has now established itself as an independent organization, with a secretariat headquartered in Dublin, Ireland and with staff based in Namibia and India. At the core of this organization are the four founding countries, Canada, Ireland, Sweden and Switzerland, along with a number of private sector organizations and international donor agencies that have committed both financial support and expertise to this new initiative.

60. GeSCI's vision is to work at local, national and international levels supporting developing countries as they create and implement strategies to harness ICT for

education and community growth. Using a multi-stakeholder approach, GeSCI focuses on delivery, offering project development and management, strategic support, facilities and resource mobilization and implementation in partnership with a wide variety of engaged partners, including Governments of developing countries, non-governmental groups, academia and private sector companies.

61. Since then, GeSCI has undertaken its work with increasing momentum. In Namibia, GeSCI is engaged in significant work with the Ministry of Education to launch the national initiative. GeSCI has assisted in forming the national ICT in Education Policy, and is currently developing the implementation plan. In India, GeSCI has placed its country facilitator in Bangalore, India, and is engaged in a comprehensive process to identify which States most need its partnership. In Ghana and Bolivia, GeSCI is continuing discussions with ministries and stakeholders to clarify the educational needs and GeSCI's potential role. GeSCI has also supported research work that will identify cost-effectiveness in technology that can be used in lesser-developed countries. At the same time, GeSCI has built its internal capacity to ensure its effectiveness and developed partnerships with key stakeholders. It also plans to eventually work in numerous other countries.

2. Contribution to the development of an information and communications technologies strategy for the United Nations system

62. In order to take advantage of the unprecedented opportunities that ICT offer for system-wide knowledge creation and management, the ICT Task Force, in collaboration with the secretariat of the United Nations System Chief Executives Board for Coordination (CEB) and the information technology managers network, has embarked on a collaborative effort to develop an ICT strategy for the United Nations system. Task Force members have participated in periodic meetings and have prepared a number of papers containing expert advice and recommendations. Through its contributions, the Task Force helped formulate a comprehensive set of actions and deliverables that would contribute to improved United Nations organizational and management practices.

3. Policy Awareness and Training in Information Technology series

63. Organized by the ICT Task Force and UNITAR in collaboration with Intel, the Policy Awareness and Training in Information Technology series continued in 2004, to enable United Nations diplomats in New York and in other countries to acquire specific computer skills and be exposed to the workings of the Internet; to raise awareness and understanding of policy and security issues related to the information society among diplomats and policy makers; and to expose Member State delegates and officials in capitals to technologies that are discussed in the WSIS process.

64. In 2004, four cycles of the 5-module certificate programme were conducted, with 67 workshops delivered and 130 participants from 88 countries trained. Of those, 86 per cent were from developing countries and 40 per cent were ambassadors or senior delegates. Around 240 participants attended the 3 open high-level seminars that were held in 2004, which covered a variety of subjects of concern to policy makers, including information security, e-health, e-government, distance learning and free and open source software.

65. Over 100 participants in 10 different ministries (including the ministries of foreign affairs, finance, industry, ICT and justice) from 35 developing countries

were accepted into the year-long global e-learning programme for senior policy makers in capitals.

4. Wireless Internet Institute Series

66. In 2004, the W2i and the ICT Task Force continued the series of multi-year programmes aimed at accelerating the adoption of wireless Internet in support of universal connectivity.

67. The objectives of the programmes are: accelerating the dissemination of information on wireless Internet benefits as countries move from the discovery phase to experimentation to full deployment in local communities; supporting the sharing of best practices among field practitioners and regulators and building a comprehensive knowledge base; and fostering a dialogue among local wireless Internet stakeholders with high-visibility conferences in key regions.

68. Groundwork for the national regulators capacity-building series was laid in 2004, and the series will begin in 2005. In addition to the three meetings held in the Global Municipal Government and Local Authority Series (see para. 45 above), W2i, the ICT Task Force and other partners organized a conference, Jumpstarting Broadband Internet Infrastructure with Wireless Technologies, in conjunction with the World Economic Forum meetings held in Amman in May 2004.

5. International Council for Caring Communities

69. The Task Force continued its collaboration with the International Council for Caring Communities (ICCC), sponsoring a conference on the theme "Age of connectivity: harnessing the generations", held in New York on 11 February 2004. The Conference's purpose was to build bridges and develop projects, services and products that support the needs of people of all ages. The programme examined the role of ICT in influencing the quality of life of older persons in the world. The conference produced a framework of how to think about ICT as an agent of change and offered a quality blueprint for an enriched society for all ages.

70. On 11 February 2005, ICCC organized a conference on the theme "Caring communities for the 21st century: imagining the possible" in New York. The conference was part of a series of interlinked conferences on the theme "Age of Longevity" organized by ICCC and the ICT Task Force, in coordination with the United Nations Human Settlements Programme, the United Nations Programme on Ageing, the Department of Public Information, non-governmental organizations and the private sector. The conference was organized in support of the Commission for Social Development. The conference addressed, among other issues, how to utilize opportunities to expand work, education, health care and other personal growth/sharing experiences via new pathways and opportunities opening up along the digital highway. The conclusions of these conferences will contribute to the preparations for the Tunis phase of WSIS.

E. Fund-raising

71. As the ICT Task Force is funded through voluntary contributions, fund-raising has been an important activity since its founding. In the period covered by this report, the following contributed to the budget: the Canadian International

Development Agency, the Cisneros Group of Companies, Finland, Nokia, STMicroelectronics, Sweden, Switzerland, Talal Abu-Ghazaleh Organization and the United Nations Educational, Scientific and Cultural Organization. However, the financial position of the Task Force remains constrained.

V. Assessment and the way forward

72. At their meetings, Task Force members have identified and discussed achievements and challenges, with a view to improving the working methods and impact of the Task Force. It was agreed that many elements have contributed to the prominence and influence that the Task Force has achieved since its launch in November 2001. The Task Force provides a truly global policy platform for multi-stakeholder interaction and consensus-building on ways and means to harness the potential of ICT for servicing and advancing development, especially poverty reduction. The Task Force helps promote cross-sectoral dialogues on key policy concerns and issues, linking the ICT and development agendas in WSIS and other forums. The patronage of the Secretary-General for the ICT, its direct link to the Economic and Social Council and the participation of key United Nations agencies provide global visibility and attract active high-level and expert participation. The decentralized structure of thematic working groups and regional networks has achieved global reach by gaining access to, and providing an outlet for, regional and subregional needs and concerns and provides a platform for the presentation of views and perspectives of underrepresented constituencies. The Task Force has also been successful in facilitating partnership and synergy between the different groups. It has been able to function in a cost-effective, flexible and relatively non-bureaucratic manner with light secretariat support by joining with interested partners in undertaking its activities.

73. The Task Force will face several challenges in the final year of its mandate, including in relation to the follow-up to the Geneva phase of WSIS and the preparations for Tunis. The effectiveness of the Task Force in reaching its goals is contingent on the continued involvement of partners, especially Governments, key institutions and other actors engaged in ICT-for-development activities.

74. Funding, which is based on voluntary contributions, remains a challenge. The implementation of agreed plans of the Task Force is sometimes impeded by the unpredictability of incoming resource flows.

75. In 2005, the Millennium Summit five-year review and the second phase of WSIS will provide a unique opportunity for mainstreaming ICT into the broader development agenda. In the last year of its mandate, the Task Force has the opportunity to provide advice to the Secretary-General on ICT matters, including effective integration of ICT into United Nations processes to help achieve greater efficiency and effectiveness.

76. In July 2004, the Secretary-General communicated his very positive reaction to a proposal of the Chairman of the ICT Task Force concerning a broad-based global alliance for ICT and development. The Secretary-General stated that the Task Force has played a very useful role in linking the WSIS ICT agenda with the development goals of the United Nations and that there would be, therefore, merit in the idea of an alliance that would pursue innovative approaches also in the future. The Secretary-General requested a more detailed proposal.

77. In implementation of this request, the Task Force has been undertaking extensive consultations. Consultations launched after the Berlin meeting of the Task Force in November 2004 have resulted in a broad recognition of the need for the continuation of dialogue among all relevant stakeholders focused on the role of ICT in development that would build on the work of and cooperate with existing institutions and networks on cross-cutting and cross-sectoral issues related to ICT for development and Information Society. Consultations and exchanges of views on the objective and modalities of the proposed alliance are continuing with a view to presenting appropriate recommendations to the Secretary-General.

VI. Conclusion
Making the attainment of the internationally agreed development goals possible

78. The lack of digital opportunities in many poor countries is an effect, not a cause. It is largely a reflection of deeper, more fundamental divides in economic opportunity, health, education and empowerment. For champions of ICT for development, a key objective in recent years has been to mainstream ICT into development. This has involved articulating the role of ICT in the development portfolio, attempting to achieve the right balance of analytical and qualitative arguments and linking into the existing vocabulary of development in the areas of poverty, health, education, gender and the environment.

79. Since the Millennium Summit in 2000, development activities have been increasingly viewed through the lens of the internationally agreed development goals. In the context of the internationally agreed development goals, ICT are increasingly seen not as ends in themselves but rather as critical enablers in the development process. In essence, with the strategic, intensive, widespread and innovative use of ICT-for-development policies and programmes, the ambitious agenda of the internationally agreed development goals, including the MDGs, becomes much more possible to realize.

80. After years of experimentation on ICT in often stand-alone, frequently unsustainable pilot projects, attention is now being drawn to the need to leverage ICT for poverty reduction strategies and the attainment of the internationally agreed development goals through a focus on integration, scaling and replication. From experience, it is clear that ICT and technology "push" projects have generally been ill-suited to fulfilling the requirements of the internationally agreed development goals. Rather, "pulling" ICT into development projects in which ICT are appropriate and relevant at an early stage — often with a mix of traditional and new media and achieved via multi-stakeholder partnerships — to achieve greater efficiency and service delivery will have far greater poverty impact.

81. The fact that the unique characteristics of ICT, if conceived as means and not ends, can, in theory, act as powerful development enabler does not mean that it will necessarily do so. In order for ICT to positively foster development goals, they must be employed where relevant, appropriate and effective, as part of a truly integrated and multi-stakeholder development approach. Strategic alliances between Governments, business, civil society and international organizations are a growing feature of both developed and emerging economies. Such multi-stakeholder

partnerships are necessary because it is increasingly clear that no one sector in society can deliver the complexities of sustainable human development alone.

82. With vision and leadership from all relevant players in the ICT community — whether Governments, business, civil society, academia or international organizations — these objectives can be achieved.

83. The emerging consensus is that ICT-for-development policies and programmes must, to a great extent, be understood as subordinate to, and in the service of, the internationally agreed development goals. The measurement of success for ICT policies and programmes is not an increase in basic access to ICT but the impact of those ICT on progress towards the achievement of the internationally agreed development goals. For the moment, mainstreaming ICT for the achievement of the internationally agreed development goals remains a work in progress.

Notes

[1] In continuation of the practice of the previous annual reports, section II presents a broad outline of the environment in which the ICT Task Force operated and its implications for ICT for development and is based on the discussions at the global forums and other meetings organized by the ICT Task Force. This outline does not necessarily reflect the view of Task Force members.

[2] See http://www.unicttaskforce.org/perl/documents.pl?id=1519.

[3] This publication does not reflect an agreed position of the Task Force members.

[4] See http://www.unicttaskforce.org/perl/documents.pl?id=1389.

[5] This publication does not reflect an agreed position of the Task Force members.

[6] See http://www.epol-net.org/ and http://www.epolafrica.org.

[7] This publication does not reflect an agreed position of the Task Force members.

[8] www.gesci.org.